

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of identifying and managing network elements in a communication system, the method comprising:

representing a network element feature as a logical entity;

defining one or more characteristics associated with the logical entity, which characteristics are related to functional attributes of the represented network element feature with respect to the communication system, wherein each characteristic has a plurality of possible values; and

defining ~~one or more~~ a plurality of profiles for the logical entity representing the network element feature, wherein each profile assigns a corresponding specific value to each characteristic of the logical entity,

wherein the one or more characteristics comprise failure conditions associated with the network elements, and wherein the profiles define corresponding alarm severity levels to be generated for each corresponding failure condition.

2. (Original) The method of claim 1 wherein the communication system comprises a SONET ring network, and wherein the network elements comprise network interface devices or transmission links between network interface devices.

3. (Original) The method of claim 2 wherein the network element feature is a network hardware device.

4. (Original) The method of claim 2 wherein the network element feature is a data signal.

5. (Currently Amended) The method of claim 1 wherein each network element of the communication system is assigned ~~a profile of the one or more~~one of the profiles.

6. (Canceled)

7. (Currently Amended) The method of claim ~~6-1~~ wherein the alarm severity levels indicate a type of alarm to be transmitted to a network administrator of the communication system according to the profile and if a corresponding failure condition is detected by the network element represented by the logical entity.

8. (Currently Amended) ~~The method of claim 5~~ A method of identifying and managing network elements in a communication system, the method comprising:

representing a network element feature as a logical entity;

defining one or more characteristics associated with the logical entity, which characteristics are related to functional attributes of the represented network element feature with respect to the communication system, wherein each characteristic has a plurality of possible values; and

defining a plurality of profiles for the logical entity representing the network element feature, wherein each profile assigns a corresponding specific value to each characteristic of the logical entity,

wherein the one or more characteristics comprise performance characteristics associated with the network elements, and wherein the ~~one or more~~ profiles define corresponding alert levels to be generated for each corresponding performance characteristic.

9. (Currently Amended) The method of claim 8 wherein the alert levels indicate a type of alert to be transmitted to a network administrator of the communication system according to the profile and if a corresponding performance measurement is detected by the network element represented by the logical entity.

10. (Currently Amended) The method of claim 5 wherein the one or more characteristics further comprise user characteristics associated with users of the network elements, and wherein the ~~one or more~~ profiles also define user attributes for each user.

11. (Currently Amended) A network node for use in a communication network, the network node comprising:

means for representing a feature of the network node a logical entity;

means for defining one or more characteristics associated with the logical entity , which characteristics are related to functional attributes of the represented network node with respect to the communication network, wherein each characteristic has a plurality of possible values; and

means for defining ~~one or more~~ a plurality of profiles for the logical entity representing the network node, wherein each profile assigns a specific value to each characteristic of the logical entity,

wherein the one or more characteristics comprise failure conditions associated with the network node, and wherein the profiles define corresponding alarm severity levels to be generated for each corresponding failure condition.

12. (Original) The network node of claim 11 wherein the communications network comprises a SONET network and wherein the network node comprises one of a network interface device and a transmission link between network interface devices coupled to the communications network.

13. (Original) The network node of claim 12 wherein the feature of the network node is a network hardware device.

14. (Original) The network node of claim 12 wherein the feature of the network node is a data signal.

15. (Currently Amended) The network node of claim 11 wherein the network node is assigned ~~a profile of the one or more~~one of the profiles.

16. (Canceled)

17. (Currently Amended) The network node of claim ~~16~~11 wherein the alarm levels indicate a type of alarm transmitted to a network administrator of the communication network if a corresponding failure condition is detected by the network element represented by the logical entity.

18. (Currently Amended) The network node of claim 15 wherein the one or more characteristics comprise performance characteristics associated with the network node, and wherein the ~~one or more~~ profiles define corresponding alert levels to be generated for each corresponding performance characteristic.

19. (Original) The network node of claim 18 wherein the alert levels indicate a type of alert transmitted to a network administrator of the communication system if a corresponding performance measurement is detected by the network element represented by the logical entity.

20. (Currently Amended) The network node of claim 15 wherein the one or more characteristics further comprise user characteristics associated with a user of the network node.

21. (Currently Amended) The method of claim 1, further including modifying ~~the one or more~~ at least one of the profiles for said each characteristic according to a user preference.

22. (Currently Amended) The network node of claim 11, further including means for modifying ~~the one or more~~ at least one of the profiles for said each characteristic according to a user preference.